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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,246	01/21/2004	Kia Silverbrook	MPA10US	1590
24011	7590	09/18/2006	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, NSW 2041 AUSTRALIA			MARTIN, LAURA E	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/760,246	<b>Applicant(s)</b> SILVERBROOK ET AL.	
	<b>Examiner</b> Laura E. Martin	<b>Art Unit</b> 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverbrook et al. (US 6439908).

As per claim 1, Silverbrook et al. teaches a printhead assembly, comprising: at least two printhead modules (figure 15, element 10), each comprising at least two printhead integrated circuits (figure 4, element 18), each of which has nozzles formed therein for delivering printing fluid onto the surface of print media (column 3, lines 45-50), and a support member on which the at least two printhead integrated circuits (figure 3, element 32) are fixably mounted (via elements 42 in figure 3); and a casing (figure 2, element 14) in which the at least two printhead modules are arranged so as to be removably mounted in linearly aligned relationship, wherein the support member has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits (column 2, lines 16-27), and each printhead module has end portions which permit interconnection of the linearly aligned printhead (figure 15) modules and provide for fluid connection of the channels of the support members thereof (figure 3, element 42).

As per claim 5, Silverbrook et al. teaches a printhead assembly according to claim 1, wherein: the at least two printhead modules are each formed as a unitary arrangement (figure 15, element 10) of the at least two printhead integrated circuits (figure 4, element 18), the support member (figure 3, element 32), at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member, and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits (figure 8, elements 48); and each of the support members has a plurality of apertures (figure 7, element 42) extending from the at least one channel (figure 7, element 80) through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (figure 7, column 3, lines 45-47).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. (US 6439908) in view of Milan (US 5658158).

Silverbrook teaches the printhead assembly of claim 1; however, it does not disclose end portions comprising complementary female and male end portions.

Milan teaches end portions of each of the printhead modules comprise complementary female and male end portions (figures 1 and 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the printing apparatus of Silverbrook with the disclosure of Milan in order to create a secure connection within the assembly.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. (US 6439908) and Milan (US 5658158), and further in view of Higgins (US 6180002).

Silverbrook and Milan teach the apparatus of claim 2; however, neither teaches a sealing adhesive is provided at the interface of the interconnected printhead modules, wherein the sealing adhesive is an epoxy.

Higgins teaches a sealing adhesive is provided at the interface of the interconnected printhead modules (figure 4, element 66), wherein the sealing adhesive is an epoxy (column 5, line 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the printing apparatus of Silverbrook as modified with the sealing adhesive of Higgins in order to create a higher quality and more durable ink cartridge.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2853

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura E. Martin

  
9/14/06  
**MANISH S. SHAH**  
**PRIMARY EXAMINER**